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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/074,304

02/12/2002

Rusty Shepard

06005/38039

6402

4743

7590

12/22/2004

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EXAMINER

SHIN, CHRISTOPHER B

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/074,304

**Applicant(s)**

SHEPARD ET AL.

**Examiner**

Christopher B Shin

**Art Unit**

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,10-27,32-38 and 42-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-9, 28-31, 39-41, 49-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Amendment received September 9, 2004 has been entered and carefully considered. Claims 1-54 are pending in the application; claims 6-7, 10-27, 32-38 & 42-48 are withdrawn from consideration; and claims 1-5, 8-0, 28-31, 39-41 and 49-54 have been examined and carefully considered.

### ***Response to Arguments***

2. Applicant's arguments filed September 9, 2004 have been fully considered but they are not persuasive. The examiner modifies the art rejection in response to the applicant argument as follows.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 8-9, 28-31 & 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukai et al. (4,542,452).

a. Fukai reference teaches the all of the basic/substantially identical claimed limitations as follows:

Claims 1-5, 8-9, 28-31, 39-41

Fukai et al (4,542,452)

- A controller for use in a controlling a plurality of devices within a process

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- Feature of figure 1, (10)
- a processor adapted to be programmed to execute one or more programming routines
  - Feature of (13)
- Memory coupled to the processor and adapted to store the one or more programming routines to be executed on the processor
  - Feature of (21)
- A plurality of field device input/output ports communicatively connected to the processor
  - Feature of Ei & Eo and Di & Do
- A configuration communication port connected to the processor and to the memory
  - Feature of (18, 20, 50)
- Wherein the controller can operate as a stand-alone controller or as one of a plurality of controller within a distributed process control system from which configuration information can be downloaded
  - Features BSC of figure 8 or CSC of figure 9, column 7, line 30-68
- Second/third communication port adapted to be intermittently connected to a user interface to enable the user interface to view information stored within the memory or the processor
  - Feature of (18, 20, 50)
- Register map
  - Obvious feature of communications between (17/19/30) and (13)
- non-volatile portion adapted to store configuration information pertaining to the controller/programming routines
  - Feature of (21 in operation with 13, 17, 19, 30)
- Programming routines compatible with a distributed process control system program paradigm
  - Obvious feature of supporting more than on controllers (17, 19, 13, 30)
- Second/third communication port is a MODBUS TCP
  - Not expressly taught, but well-known type in the art
- Wherein configuration information is downloaded via the configuration communication port
  - Feature of communications between (13, 17, 19, 30)
- wherein the distributed process control system comprises a bus connecting the plurality of controllers, and wherein the bus is connected to the controller via the configuration communication port such that the configuration information can be downloaded from the distributed process control system
  - Feature of communication between (13, 17, 19, 30)

b. As for claims 1-5, 8-9, 28-31 & 39-41, the difference between the claimed invention and the teachings of the Fukai reference is that the reference does not expressly disclose a specific type of MODBUS TCP; however, such

communication type is one of the well known and practiced in the art. The examiner takes official notice on such well-known communication type.

Therefore, it would have been obvious at the time the invention was made to one having ordinary skill in the art easily choose and add one of such well known communication type such as the MODBUS TCP type in the Fukai's system for the reasons stated above.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

6. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher B Shin whose telephone number is 571-272-4156. The examiner can normally be reached on 6:30-5:00 M,Tu,Th,F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher B Shin  
Primary Examiner  
Of 2182



December 13, 2004  
CBS